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Item 6 of the provisional agenda

"GOOD PRACTICES" IN POLICIES AND MEASURES

Workshop on "good practices" in policies and measures

Note by the Chairman of the Subsidiary Body for Scientific and Technological Advice

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I. INTRODUCTION

A. Mandate

1. The Conference of the Parties (COP), at its fourth session, adopted the Buenos Aires Plan of Action, which included work on "best practices" in policies and measures for the mitigation of climate change as part of the preparations for the first session of the COP serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP1) (FCCC/CP/1998/16/Add.1).[1] The issue of "best practices" in policies and measures was included in this plan as an element of the work to be done in the lead up to COP/MOP1.

2. At its fourth session, the COP also requested the secretariat to prepare a report on "best practices" in policies and measures, to organize a workshop to assess "best practices" in policies and measures on the basis of the conclusions of the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its eleventh session, and to report the results to the COP at its sixth session.

3. At its twelfth and thirteenth sessions, the SBSTA considered the outcome of the work on "best practices" in policies and measures, including the report from the workshop.[2] The COP, at the first part of its sixth session, considered this issue further. A draft decision entitled "Good practices in policies and measures among Parties included in Annex I to the Convention" was prepared by a contact group, which recognizes the value of sharing information on "good practices" in policies and measures and recommends that the work on this issue continue.

4. The COP, at the same session, requested the secretariat to organize the first workshop of a series under the above-mentioned draft decision. It also requested the SBSTA at its fourteenth session to outline the terms of reference for the workshop, based on submissions of Parties to be received by 31 March 2001.

5. The secretariat received four such submissions, which are contained in documents FCCC/SBSTA/2001/MISC.2 and FCCC/SBSTA/2001/MISC.2/Add.1. Based on these submissions, SBSTA at its fourteenth session concluded that the workshop should advance the work on sharing experience and exchanging information on "good practices" in policies and measures, and should build on the initial results obtained at the workshop on "best practices" in policies and measures held in 2000.

B. Scope of the note

6. This report is prepared in response to the request of the COP at the first part of its sixth session. It covers the proceedings of the workshop and the major issues identified. It will be considered by the fifteenth session of the SBSTA with a view to identifying any further action by the COP. The SBSTA will then forward the report to the COP together with any suggestions regarding further action for consideration by the COP in the context of finalizing the draft

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[1] Decisions 1/CP.4 and 8/CP.4.

[2] One of the conclusions from this workshop was that given the differences in national circumstances the concept which may prove to be useful and workable in the advancing of implementation of the Convention and the Kyoto Protocol in the international context is that of "good practices" instead of that of "best practices". In the domestic context, "best practices" appeared as a useful and workable concept.

decision on "good practices" in policies and measures contained in documents FCCC/CP/2001/2/Add.5 and FCCC/CP/2001/5/Add.2.

II. PROCEEDINGS

7. The workshop on "good practices" in policies and measures was held in Copenhagen from 8 to 10 October 2001 with the financial support of the Governments of Denmark and Norway. It was organized by the UNFCCC secretariat in close cooperation with the Danish Energy Agency and the Norwegian Ministry of Environment. The agenda of the workshop is attached in the annex to this report.

8. In total, 127 representatives from countries and organizations attended the workshop. 50 representatives were nominated by Annex II Parties, 17 by Annex I Parties with economies in transition and 42 by Parties not included in Annex I to the Convention. In addition, ten representatives of intergovernmental organizations and eight representatives of non-governmental organizations attended the workshop.

9. The workshop was officially opened by the Chairman of the workshop Mr. Harald Dovland, Chairman of the SBSTA. Mr. Svend Auken, Minister for the Environment and Energy of Denmark, delivered a welcoming address. Ms Claire Parker, coordinator, UNFCCC secretariat, explained the objectives of the workshop in the context of the recent Bonn Agreement, the outcome of earlier negotiations on "good practices" in policies and measures, and the conclusions from the previous workshop on "best practices" in policies and measures (Copenhagen, April 2000).

10. Two keynote speakers addressed the issue of "good practices" in policies and measures from different angles. Mr. Rob Swart from the IPCC summarized the main findings from the Intergovernmental Panel on Climate Change (IPCC) with regard to policies and measures. He emphasized the importance of considering a broad set of criteria to design and assess policies and measures for mitigating and adapting to climate change. He also emphasized the need to select and implement a portfolio of policies and measures instead of single measures to ensure efficiency in achieving environmental and economic objectives. Mr. Jonathan Pershing, International Energy Agency (IEA) presented a theoretical framework for "good practices", criteria for assessing these practices, broadly similar to the ones identified by the IPCC, and the application of these criteria in assessing different policies and policy instruments already used by IEA countries.

11. The Chairman then explained the approach to the workshop, based on the terms of reference for the workshop agreed by SBSTA. He noted that the secretariat had received more than 40 proposals for presentation from Parties and intergovernmental organizations.

12. The addressed topics included "good practices" relevant to (a) cross-cutting issues in policy design and implementation, (b) national programmes and evaluation of the effectiveness of policies and measures, (c) policy instruments, (d) measures relating to emissions from industry and end-use equipment, (e) measures relating to emissions from transport. The workshop also considered "best practices" in policies and measures in countries with economies in transition (EIT) and the issue of minimizing adverse effects on developing country Parties of policies undertaken by Annex I Parties. These two topics were dealt with in round-table discussion.

13. The session on "good practices" in policies and measures to address greenhouse gas (GHG) emissions, chaired by Mr. Lambert Gnapelet (Central African Republic) and Ms Daniela Stoycheva (Bulgaria), examined a range of cross-cutting issues relating to the design, implementation and assessment of "good practices" in policies and measures based on the experience of both Annex I and non-Annex I Parties.

14. A presentation from the Organization of Economic Cooperation and Development (OECD) addressed the review of environmental performance of policies and measures in OECD countries. A presentation was made from France and the World Energy Council on the experience of both OECD and selected non-OECD countries in implementing several policies and measures aimed at improving energy efficiency. Further presentations gave specific examples of "best practices" from an Annex I country, Finland, and a developing country, Brazil.

15. The session on national programmes, and evaluation of the effectiveness of policies and measures, chaired by Mr. Festus Luboyera (South African Republic) and Mr. Peter Wittoeck (Belgium), discussed "good practices" in national programmes, from the perspective of both Annex I and non-Annex I Parties. The coverage ranged from general descriptions of "good practices" in the national programmes of different countries, as given in presentations from Costa Rica, Egypt, Philippines, the Netherlands and Slovakia, to more focused analyses of specific issues relating to national programmes, as made in presentations from Canada, Germany, Japan and Sweden.

16. The session on policy instruments, chaired by Mr. Vute Wangwacharakul (Thailand) and Mr. Lee Schipper (Consultant), examined a range of policy instruments being implemented by Parties to reduce greenhouse gas emissions. Participants shared their experience and assessed the relative merits of various instruments or portfolios of such instruments, including regulatory, fiscal and market-based instruments, and voluntary agreements. The presentations made by Australia, Denmark, Norway, Switzerland, the United Kingdom and the United States, as well as by the IEA, drew a number of lessons that could be of benefit to Parties.

17. The session on "good practices" in policies and measures to address GHG emissions from industrial and end-use equipment, chaired by Mr. Festus Luboyera (South African Republic) and Mr. Peter Wittoeck (Belgium) included presentations describing a number of specific programmes, or elements within programmes, to address greenhouse gas emissions from the industrial sector, as in the presentations from the European Community (EC), Denmark, Hungary, Mexico and the Republic of Korea, or addressing specific aspects of industrial and end-use equipment, as in the presentations from Germany and Japan.

18. The session on "good practices" in policies and measures to address GHG emissions from transport, chaired by Mr. Vute Wangwacharakul (Thailand) and Mr. Lee Schipper (Consultant), discussed specific examples of such policies and ways to monitor and evaluate their performance. The presentations made by Austria, Denmark, France, India, IEA and the Shell Foundation were concerned with mitigation policies in transport in both developing and developed countries.

19. The discussion of the round table on "best practices" in policies and measures in EIT countries, chaired by Ms Elena Petkova (World Resources Institute) centred on some common criteria, qualitative and quantitative indicators for assessing these policies, and specific examples

of implementation of these criteria and indicators in Bulgaria and Poland.[3] The session also covered climate change mitigation scenarios in the Russian Federation and some results from the in-depth reviews of energy efficiency and related environmental aspects under the Protocol on Energy Efficiency to the Energy Charter presented by Denmark. Participants in the session included Mr. Andrzej Kassenberg (Poland), Ms Valia Peeva (Bulgaria), Mr. Valery Sedyakin (Russian Federation) and Mr. Peter Helmer Steen (Denmark). At the end of the session, Ms Petkova summarized the conclusions of the discussion.

20. The round table on ways of minimizing the impact of reponse measures taken by Annex I Parties on developing countries, chaired by Mr. Jonathan Pershing, IEA, addressed ways of minimizing such impacts, with a particular focus on how oil-exporting developing countries would be affected. A number of panel members made presentations which served as a basis for the discussion. The members of the panel represented a broad range of expertise and points of view, and included Mr. Abdulmohsen Al-Sunaid (Saudi Arabia), Mr. Pierre Giroux (Canada), Mr. Knut Alsfen (Norway), Mr. Ewaryst Hille (Poland), Mr. Greg Cook (ERAS) and Ms Johanna Waesch (ERAS). In concluding the session, Mr. Pershing provided a summary of the discussion.

21. The closing plenary session was chaired by Mr. Harald Dovland and Mr. Hans Jürgen Stehr (Denmark). During the session, which took place on the first and second days of the workshop, the chairpersons of the different sessions reported to the plenary session the key issues identified and examined in each session. In the ensuing discussion participants provided views on these key issues and also provided many ideas for future work on "good and best practices" in policies and measures.

III. MAJOR ISSUES IDENTIFIED DURING THE WORKSHOP

A. Generic issues relating to "good practices" in policies and mesures

22. Parties used a broad range of policies and measures for mitigating climate change as part of their national climate change programmes and also as part of their sectoral policies. The outcome of the discussion during the workshop suggested that while these policies were broadly similar across countries, the details of implementation could differ significantly due to different national circumstances. National circumstances defined to a large extent policy choices, and the priorities given to specific policies. However, it was difficult to asses the level of impact of national circumstances on policy choices.

23. Not only were the policies broadly similar, but the criteria used to assess and evaluate these policies were broadly similar as well. Nonetheless, the weights given to different criteria varied from country to country depending on national circumstances. The IPCC provided a list of the most important criteria used in the policy-making process, including environmental effectiveness, cost effectiveness, distributional considerations (inter-generation and intra-generation) and administrative and political feasibility. Similar criteria have been used by intergovernmental organizations, such as IEA and OECD. Most Annex I countries also applied these criteria to define which are their "good and best practices". In addition, they used other criteria, such as limited negative impact on other policy areas, ancillary benefits, energy security and diversity, encouraging structural changes which reduce CO_2, and allowing target groups

[3] These criteria and indicators were applied within the framework of a study coordinated by the World Resource Institute and the Regional Environmental Centre in Hungary, with the participation of several governmental and non-governmental organizations from Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovenia.

flexibility in choosing actions to be taken while assuring that the goals set are achieved. Other important criteria emphasized during the workshop encompassed the need to minimize the adverse impact of policies and measures of developed countries on the economies of developing countries.

24. Countries applied different weights to various criteria used in climate change policy-making and in defining their "good and best practices". The need to ensure environmental effectiveness and economic efficiency were cited as the most prominent criteria used in formulating and implementing their national climate programmes. In many cases, ancillary benefits have motivated the policy choices rather than climate change considerations.

25. At the sectoral level, such as transport, several additional criteria were mentioned that characterize "good practices", including verifiable emission reductions, innovative approaches to influencing consumer choices, inclusiveness, and implementing measures following the prevention principle, i.e. transport planning, which could help to avoid the problems before they become severe. In transport, as well as in some other sectors, "good and best practices" were not always easy to define and agree on, as demonstrated by the current controversy over bus fuels in Delhi, India.

26. With regard to the policy instruments, a wealth of information on such instruments, and in particular on economic instruments, has recently been collected and evaluated by the OECD. The critical assessment of these policies and measures suggested that cost-effectiveness and environmental effectiveness have been considered as the most important criteria for assessing the performance of these polices. However, achieving cost-effectiveness was not always possible, for example where different targets were set at sectoral levels, in cases of tax exemption of sectors or sources, failure to include environmental externalities, inadequate capacity to monitor and evaluate the performance of policies, excessive reliance on legal systems to set environmental targets, and poor integration of economic criteria into environmental policy-making.

27. The experience of implementing a menu of common criteria allowing flexible application to a range of very different policies and measures in six EIT countries (Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovenia) suggested that such criteria could be very useful in identifying and assessing "good and best practices". These criteria could be measured by quantitative and qualitative indicators. The criteria and indicators would help to assess the level of GHG emission reductions as well as the achievement of other policy goals such as job creation, institutional development, sustainability of policies and measures, and the creation of incentives for technological innovation. It was easier to apply these criteria and to assess them using indicators at the level of specific project or measures, e.g. programmes to improve energy efficiency in the municipal sector, than at the level of national policy or policy instruments, such as carbon/energy taxation.

28. Similarities and differences in the implementation of policies and measures and in their assessment received much attention in most sessions of the workshop. In the case of national programmes of Annex I Parties, it was emphasized that while there may be similarities in a number of the aspects of programmes adopted by some of these countries, given their disparate national circumstances it was difficult to establish a common formula that could apply to all countries. The different national programmes that were discussed thus included various approaches, involving both regulatory and fiscal instruments, a different mix of such instruments

and different methodologies to assess emission-reduction potentials (bottom-up and top-down methodologies, ex-ante and ex-post evaluation).

29. A study carried out by the French Agency for Environment and Energy Efficiency (ADEME) conducted a study in cooperation with the Asian Pacific Energy Research Center (APERC) and the Latin America Energy Organization (OLADE) analysed "best practices", as well as similarities and differences in the implementation of selected measures to improve energy efficiency. The study extended to 50 countries, including all OECD and some non-OECD countries, and covered a set of measures such as thermal efficiency standards for new buildings, labelling, standards and target values for electrical appliances, fiscal measures on car purchase and use, energy audits and financial incentives.

30. The assessment of this set of measures suggested that while different national circumstances dictated different details of implementation of these measures, some convergence in their approaches and criteria used to assess them existed. For the specific set of measures under consideration, cooperation among countries could help to enhance efficiency of implementation and reduce market imperfections. Although national circumstances in EIT countries were different, they had in common many of the criteria used to define "good and best practices" such as job creation, institutional development, sustainability of policies and measures and creation of incentives for technological innovation.

31. There was consensus among the participants that a portfolio of complementary policy instruments was necessary if emissions were to be reduced to the lowest economic cost. The appropriate policy mix depended to a large extent on a Party's national circumstances. Well-focused regulatory approaches, such as establishing performance standards or energy labelling, had in many cases already offered effective solutions with significant reductions at low or negative economic costs. These might be complemented by fiscal or market-based instruments or by voluntary agreements.

32. One way to construct an effective portfolio could be to start with the selection of instruments based on prior knowledge, e.g. from ex-post evaluation and simple indicators. Thereafter, the initial portfolio could be strengthened over time by adding new instruments or changing the policy mix by shifting towards more stringent or price-based instruments to create greater incentives for the development of new technologies. Those practices which deliver the desired emission reduction, while fitting in adequately with national circumstances, may be a suitable starting point for defining "good and best practices" with regard to portfolios of instruments.

33. There was consensus on the need for the government to involve key stakeholders, such as local governments and the public and private sectors, in formulating national programmes and sectoral policies in the case of Annex I Parties. It was deemed useful for the government and the public sector to take the lead in the promotion of climate-friendly practices, including the procurement of end-use equipment that is subject to certain efficiency standards. The lessons learned from such action could provide a sound base for wider dissemination of these practices. In this context, the government's "leading by example" was also mentioned as a "good practice" to be followed.

34. Wider stakeholder participation was also cited as a priority for non-Annex I Parties, with a particular focus on engaging high-level politicians and policymakers in supporting the

development of national programmes, particularly given the fact that there are currently no legally-binding emissions-reduction commitments on developing countries.

35. A wide range of existing, new and innovative policy instruments was discussed from the point of view of countries' experience and planned activities. Voluntary agreements and market-based instruments featured prominently in this discussion. While recognizing that many different forms of voluntary agreements exist, some participants were sceptical as to whether the reductions achieved were significant compared to a business-as-usual situation unless they were backed by carbon tax, emission trading or other economic instruments. Others noted the need for robust and independent monitoring and reporting on the performance of these agreements to assess compliance. Also important was the selection of private sector partners which could be instrumental in further multiplying the implementation of technologies and practices through their sectors and the wider economy. Other participants noted the significant emission reductions already achieved through voluntary agreements in specific sectors and gases, e.g. emissions from the aluminum industry.

36. The need to gain more experience with market-based policy instruments was acknowledged in the context of the efforts of several Annex I Parties to develop or implement new fiscal measures and trading schemes. Carbon and energy taxes were able to deliver emission reductions in the sectors and sources covered by such taxes. However, difficulties were noted in extending the coverage in carbon taxation, due to pressures to create exemptions for some sectors in order to maintain their competitiveness. Establishing a market for trading renewable energy certificates in Australia was reported as an innovative approach, which helped to promote renewable energy and to reduce price barriers for its penetration into the market.

37. The importance of establishing formal links between domestic trading programmes and regional or international initiatives was emphasized, particularly those among the flexibility mechanisms being established under the Kyoto Protocol. Environmental effectiveness and economic efficiency, wide participation and positive interaction with other schemes were mentioned as criteria which characterize "best practices" in designing and implementing domestic trading schemes.

38. Participants recognized that the success of policy instruments was dependent on there being adequate political will, technical ability and acceptance among industry and consumers. Action was required to reduce barriers and develop products and practices, as well as to transform markets from the perspective of both producer and consumer. Coherency in the approaches to environmental and energy policies could help to accelerate the uptake of new efficient technologies by the market.

39. Although almost all EIT countries were likely to meet their targets under the Kyoto Protocol for the first commitment period without additional measures, these countries had identified a significant potential for low-cost emission reductions to be achieved chiefly by efficiency improvement in the energy sector. Participants from these countries noted the synergy between policies and measures for energy efficiency and climate mitigation under the Convention and the Kyoto Protocol, and initiatives undertaken to meet other commitments such as the commitments under the Protocol on Energy Efficiency and Related Environmental Aspects to the Energy Charter. Such synergy could be explored to maximize the effect on climate change mitigation.

40. The promotion of sustainable development and economic growth was seen as the main criterion in the formulation of national programmes in developing country Parties. In this context, it was mentioned that national programmes needed to be country driven, and to focus on policies and measures that entail ancillary socio-economic benefits, such as positive impacts on health and on the promotion of economic competitiveness. Several examples were presented of such national programmes, e.g. Costa Rica and Philippines, sectoral porgrammes, e.g. Egypt, the Republic of Korea, Mexico, and local governments' programmes, e.g. India. It is also worth mentioning the effort of Brazil towards reducing the GHG emissions from transport and industry through governmental programmes and the support for the voluntary efforts to reduce GHG emissions in energy intensive industries, such as cement and aluminum.

41. In discussing ways of minimizing the impact on developing country Parties of response measures taken by Annex I Parties, participants acknowledged the importance of the issue, and the need to give it due consideration in the process of addressing "good practices" in the choice and implementation of policies and measures. They also noted that the issue was broader than impacts on oil-exporting countries, as other developing countries may be affected as well.

42. Participants identified several methodological obstacles that currently limit the capability to address this issue effectively. These included problems of definition and specific attribution of policies and measures to climate-change mitigation objectives, uncertainties associated with the modelling process, and limited participation from developing country experts in the development of the relevant methodologies to address the impacts of policies and measures on developing countries.

43. A number of possible approaches to the minimization of adverse impacts of policies and measures on developing countries were identified, including the equitable application of taxes and subsidies such as not to disadvantage imports from developing countries, in the light of the need to base the assessment of such fiscal instruments on carbon content and to discourage environmentally unsound and unsafe technologies, taking into consideration policies and measures that mitigate emissions of all greenhouse gases other than carbon dioxide, and recommending that Annex I Parties should take into consideration the priorities for developing countries of economic and social development and poverty eradication.

B. Sector-specific issues relating to "good practices" in policies and measures

44. The presentations and discussion covering the sectoral level centred chiefly on "good practices" in industry, energy end-use equipment and transport. Other important sectors, such as energy, land-use change and forestry, and waste management, were noted as high-priority sectors in the development of national programmes for emissions limitation of Annex I Parties.

45. Countries differed in the type of instruments deemed appropriate to promote emission reductions in industry. While some participants advocated fiscal instruments, including tax incentives and subsidies, others preferred extending low-interest loans. Energy-efficiency labelling on end-use equipment was seen as a useful tool, which needed to be complemented by other instruments, such as economic ones. Avoiding distortions in economic competitiveness was considered important in the application of such instruments. In most cases, these instruments were combined with voluntary agreements which assumed different forms in different countries.

46. A key factor in the success of programmes to encourage GHG reductions in the industrial sector was the effectiveness of public-private sector partnerships in the formulation of such programmes. In all cases under discussion, governments formulated programmes to facilitate and encourage reductions in industrial emissions, after undertaking consultations in the industrial sector and securing the input of the relevant stakeholders.

47. Another important common approach in the implementation of such programmes was the institution of effective monitoring and auditing mechanisms, conducted by independent entities, to ensure proper accounting for emissions reductions at the level of the individual firm, industrial branch and sector.

48. Mitigation of emissions from transport remained a political challenge for all countries and success in emissions mitigation will continue to be measured by the extent to which a reduction in the growth in traffic, and associated emission reductions, is achieved.

49. There was consensus that significant emission reductions could be achieved through improvements in fuel economy. The cost of technologies available to achieve such improvements was estimated to be relatively low compared to the other measures in the sector. The role of governments was deemed essential, as they need to put in place effective policies to enhance the penetration of these effective technologies and to prevent the shift towards the purchase of larger, heavier and less efficient vehicles. Other strategies focusing on behaviour and integrated planning were also considered to be important. Some difficult but innovative measures were presented, such as combined truck/rail or truck/barge transportation as a means of reducing traffic through the Austrian Alps, which were having a beneficial restraining effect on emissions.

50. The importance of linking the CO_2 reduction strategies in transport with other policy objectives, such as the objective to ensure clean air, was emphasized. One way to address this issue was for governments to encourage public transport within and outside the cities. The need to resolve the clean air problems relating to congestion and pollution was considered to be even more urgent and important in developing countries and this also could help to promote CO_2 emission reductions.

C. Methodological issues relating to "good practices" in policies and measures

51. The complementary nature of, and some aspects of the application of, top-down and bottom-up approaches in the design and implementation of a portfolio of policy instruments, such as regulatory instruments, instruments that imply deregulations[4], fiscal and financial instruments and supporting actions, and specific measures, such as fuel substitution, fuel efficiency improvement and the promotion of clean technologies, were discussed. It was noted that while the top-down approach was more efficiency oriented and allowed for analysis of alternatives for instruments, the bottom-up approach was more effectiveness oriented and allowed for analysis of various measures, including sector-specific developments and new technologies, but not the instruments that should steer these measures.

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[4] Instruments implying deregulations could help either to establish new markets, such as trading with emission permits and green certificates, or to delegate a degree of freedom to companies and other entities within the framework of negotiated targets, such as voluntary agreements.

52. To improve efficiency and effectiveness in the implementation of policies and measures, it was deemed critical to consider policy-making as an ongoing process together with "ex-ante" evaluation, monitoring and "ex-post" assessment. Many Annex I Parties had gained experience in using "ex-ante" evaluation of policy effectiveness during the last decade. This experience suggested that scenarios play a prominent role in selecting policies to be pursued. The differences between planned and actually-achieved emission reductions stemmed chiefly from differences between the assumptions on the key drivers behind these scenarios, such as macroeconomic parameters and energy prices, and the actual development of these key drivers. The use of both top-down and bottom-up assessment could help to enhance the robustness of the conclusions on the emission reduction potential of the planned policies and measures.

53. The experience with "ex-post" assessment was somewhat limited as compared to "ex-ante" evaluation as it might take several years before the impact of policies would become visible in emission trends. Yet it was becoming increasingly important in view of the need to meet the binding targets under the Kyoto Protocol and the fact that the "low-hanging fruit" of climate policy may already have been picked up. The role of proper "ex-post" analysis in adjusting existing policies was exemplified by the analysis conducted in Finland on the impact of a possible increase in the tax on motor fuels and the differentiated car purchase taxation on the car fleet and associated emissions.

54. It was emphasized that once these programmes have been formulated and implemented, they should be subject to a process of monitoring, periodic review and updating to enable ongoing adjustment as conditions change. The degree of uncertainties associated with establishing baseline and business-as-usual conditions make this a particularly important consideration.

55. At sectoral level, in particular in the transport sector, monitoring, assessment and evaluation of the performance of policies was also deemed important, particularly where there were controversies over fuel switching. Similar models had been used to assess future transportation growth and associated emissions in some OECD and developing countries. More disaggregated indicators of the performance of transportation policies had proven to be useful in finding the responses to specific policy questions. The level of disaggregation of the indicators used depended to a large extent on the availability of data and the cost of obtaining more disaggregated data.

D. Possible approaches to future activities

56. The workshop enabled participants to exchange information on their experience in designing, implementing and evaluating policies and measures. Participants considered that this had been useful and that it should be continued in future, as some Parties had longer experience with certain policies and policy instruments than others, particularly in relation to regulatory and market-based instruments and voluntary agreements. Participants recognized the importance of learning by doing and adjusting the implementation of national programmes and policy instruments as experience was gained. They felt that future work would benefit from the presentation of more examples from developing countries.

57. In order to support such continuation of the work on "good and best practices" in policies and measures, it was suggested that the IPCC be requested to create a web-based inventory of national and sectoral experiences in policies and measures, and to produce a special report

containing an analysis of these policies. It was also suggested that the UNFCCC secretariat be requested to provide a detailed report on policies and measures based on the information provided by Annex I Parties in their third national communications.

58. Some participants expressed the view that more work at sectoral and subsectoral level should be done, including the sectors considered during the workshop, such as industry and end-use equipment and transport, and sectors which have not been discussed, but which are important for GHG mitigation, such as energy, land-use change and forestry. In particular, a need for in-depth discussions on specific industrial subsectors rather than the industrial sector as a whole was acknowledged. Other topics of discussion could include specific approaches and instruments to improve energy efficiency and promote renewables, and associated emission reductions, such as labels and standards, renewable energy certificates, information campaigns and public sector action.

59. Other participants stressed that future discussions should be of a more general nature. Approaches to selecting the most effective portfolio or mix of measures, assessment of the environmental and cost effectiveness of policies and measures, and ways of involving all relevant stakeholders in policy design and implementation, were mentioned in this context.

60. Other topics of such a general nature could centre on ways of minimizing the impact on developing country Parties of response measures taken by Annex I Parties, and in particular on the implementation of Article 2.3 of the Kyoto Protocol. Participants noted that much work will be under way on this issue following the adoption of the relevant COP decisions on Article 4.8 of the Convention and Article 3.14 of the Kyoto Protocol, and that these activities, which would cover methodological issues, policy-related issues and reporting requirements, would provide a suitable forum for further discussion. Participants also noted, however, that future workshops on policies and measures should also facilitate the exchange of information on how Annex I Parties were taking into consideration the impacts of their policies and measures on developing countries.

61. A preference for more methodological work was also expressed. In this context, future topics for the discussion of "good and best practices" in policies and measures could include the exchange of information on methodological approaches to evaluating the effectiveness and efficiency of policies and measures, and assessment of the impact of policies and measures in particular sectors by using aggregated and disaggregated indicators, for example in transport. This could also include evaluation of the impact of national circumstances. Another important area for future methodological work could include analysis of the interaction of climate policies in transport with other policies. Finally, the need for further methodological work to enhance consistency of reporting and assessment of emission reductions in all sectors, and in particular in the industrial sector, was highlighted.

62. Some participants noted the need for further discussions on issues relating to international and regional coordination of policies and measures, particularly in cases where they affected economic competitiveness. With regard to the format of future meetings, participants recommended that future workshops should focus on interaction and discussion among participants on the successes achieved, and failures and difficulties encountered, in overcoming implementation barriers in policy implementation, while placing less emphasis on presentations.

WORKSHOP ON "GOOD PRACTICES" IN POLICIES AND MEASURES

AGENDA

Chair of the workshop: Mr. Harald Dovland,
Chairman of the Subsidiary Body for Scientific and Technical Advice

Day 1: Monday, 8 October 2001

Afternoon session (2.30 p.m. to 4.00 p.m.)

OPENING PLENARY SESSION

Welcoming addresses
Mr. Svend Auken, Minister for Environment and Energy, Denmark

Introduction on the objectives of the workshop and the results obtained in the previous workshop on "best practices " policies and measures held in Copenhagen from 11 to 13 April 2000
Ms Claire Parker, UNFCCC

Policies and measures as a tool for achieving the objectives of the Convention and the Kyoto Protocol
Mr. Robert Swart, IPCC

Dealing with climate change:
Policies and measures, past and future
Mr. Jonathan Pershing, IEA

Afternoon session (4.30 p.m. to 6.30 p.m.)

PLENARY SESSION ON CROSS-CUTTING ISSUES

Assessing the cost-effectiveness of domestic policies and policy packages in OECD countries
Mr. Tom Jones, OECD

Energy efficiency policies and measures: lessons from implementation of selected measures in OECD and non-OECD countries
Mr. François Moisan, France and the World Energy Council

Efficiency and effectiveness of policy instruments: concepts and practice
Mr. Adriaan Perrels, Finland

Brazilian efforts towards reducing greenhouse gas emissions
in the transport sector and in energy intensive industries
Mr. Haraldo Machado Filho, Brazil

Day 2: Tuesday, 9 October 2001

Morning session (9 a.m. to 1 p.m.)

PARALLEL SESSIONS ON NATIONAL PROGRAMMES, EVALUATION OF EFFECTIVENESS OF POLICIES AND MEASURES, AND POLICY INSTRUMENTS

Session A: NATIONAL PROGRAMMES AND EVALUATION OF EFFECTIVENESS OF POLICIES AND MEASURES

The German Climate Protection Programme:
methodological, institutional and international aspects
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ROUND-TABLE DISCUSSIONS ON "BEST PRACTICE" POLICIES AND MEASURES IN ANNEX I COUNTRIES WITH ECONOMIES IN TRANSITION

Discussion leader: Ms Elena Petkova, World Resources Institute
(Participants: Mr. Andrzej Kassenberg, Poland, Ms Valia Peeva, Bulgaria, Mr. Valery Sedyakin, Russian Federation, Mr. Peter Helmer Steen, Denmark)

ROUND-TABLE DISCUSSION ON WAYS OF MINIMIZING THE IMPACT OF RESPONSE MEASURES TAKEN BY ANNEX I COUNTRIES ON DEVELOPING COUNTRIES

Discussion leader: Mr. Jonathan Pershing, IEA
(Participants: Mr. Abdulmohsen Al-Sunaid, Saudi Arabia, Mr. Pierre Giroux, Canada, Mr. Knut Alsfen, Norway, Mr. Ewaryst Hille, Poland, Mr. Greg Cook, ERAS, Ms Johanna Waesch, ERAS)

Afternoon session (2 p.m. to 4 p.m.)

PLENARY SESSION AND CLOSING

Report to the plenary session by the chairpersons of the different sessions
Discussion of the reports and of ways to facilitate cooperation between Parties to enhance the effectiveness of their policies and measures and to enhance reporting on them

Closing remarks on the lessons learned and the process forward

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UNITED NATIONS

Framework Convention on Climate Change

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SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE
Fifteenth session
Marrakesh, 29 October - 9 November 2001
Item 3 (a) of the provisional agenda

MATTERS REFERRED BY THE CONFERENCE OF THE PARTIES TO THE SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

THIRD ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

Note by the secretariat

I. INTRODUCTION

A. Mandate

1. Article 9 of the Convention states that the Subsidiary Body for Scientific and Technological Advice (SBSTA) is to provide the Conference of the Parties (COP) and, as appropriate, its other subsidiary bodies with timely information and advice on scientific and technological matters ... drawing upon existing competent international bodies.

2. At its fourteenth session, the SBSTA took note of the completion of the Third Assessment Report (TAR) of the Intergovernmental Panel on Climate Change (IPCC) and commended the IPCC on the high quality of its scientific work. It requested the secretariat to put the IPCC Third Assessment Report and the IPCC Synthesis Report on the agenda of the fifteenth session of the SBSTA.

B. Scope of the note

3. This note provides background information on the Third Assessment Report of the IPCC, including its Synthesis Report, with a view to facilitating its consideration by the SBSTA. It provides some general information on the report and identifies a number of issues relating to its uses, in particular to the possible future work of the subsidiary bodies. Given the large amount of information in the Third Assessment Report, this document provides only a brief introduction

to it and a few examples of how it may be relevant to the work of the SBSTA and other bodies of the Convention.

C. Possible action by the SBSTA

4. The SBSTA may wish to take note of this document, to determine how it wishes to assess and use the large amount of information in the TAR, to identify matters for further consideration and to agree on further action. It may also wish to call relevant issues to the attention of the Subsidiary Body for Implementation (SBI) and the COP.

II. BACKGROUND

5. The World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) established the IPCC in 1988. The role of the IPCC is to assess the scientific, technical and socio-economic information relevant for understanding the risks of human-induced climate change. It does not carry out new research nor does it monitor climate-related data. It bases its assessments mainly on published and peer-reviewed scientific technical literature.

6. The IPCC completed its First Assessment Report (FAR) in 1990. It was published in three volumes, each with a Summary for Policymakers (SPM).[1] The three reports provided information on the science, impacts of climate change and on response strategies. The FAR was presented at the second World Climate Conference, convened in Geneva in October 1990. A ministerial declaration at that conference called for negotiations on a climate convention to begin as soon as possible. In December 1990, the United Nations General Assembly accepted the IPCC report and established the Intergovernmental Negotiating Committee as the entity which would lead the creation of such a convention.

7. The IPCC provided additional scientific, technical and socio-economic advice to the world community in the early 1990s, particularly to the UNFCCC through its periodic special assessment reports on various aspects of the state of knowledge of the causes of climate change, its potential impacts, and options for response strategies. The IPCC provided a Second Assessment Report (SAR) in 1995, also in three volumes. In addition, a Synthesis Report was produced, based on the work of all three groups, relating to the interpretation of Article 2 of the Convention. Thus the full report, under the title "*IPCC Second Assessment: Climate Change 1995*", comprises four volumes.[2]

8. At its first session, in 1995, the SBSTA expressed strong support for the IPCC as one of the independent and prominent sources of scientific and technical information relevant to the

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[1] The FAR consisted of three volumes entitled: Volume 1: Scientific Assessment of Climate Change - Report of Working Group I, Volume 2: Impacts Assessment of Climate Change - Report of Working Group II, and Volume 3: The IPCC Response Strategies - Report of Working Group III.

[2] Volume 1: The IPCC Second Synthesis Assessment of Scientific-Technical Information Relevant to Interpreting Article 2 of the United Nations Framework Convention on Climate Change, Volume 2: The Science of Climate Change: Contribution of Working Group I of the IPCC, Volume 3: Scientific-Technical Analyses of Impacts, Adaptations and Mitigation of Climate Change: Contribution of Working Group II of the IPCC, and Volume 4: Economic and Social Dimensions of Climate Change: Contribution of Working Group III of the IPCC.

implementation of the Convention, as specified in Article 9 of the Convention (FCCC/SBSTA/1995/3). It was recognized that the SAR would include important information for the Convention, and would require priority attention at the second and future sessions of the SBSTA to enable it to provide relevant advice to the Ad Hoc Group on the Berlin Mandate as necessary (FCCC/AGBM/1995/2, para. 19 (f)) and to the Conference of the Parties (COP). In response to the request to provide a document on the SAR for the second session of the SBSTA, the secretariat provided a note with three addenda (FCCC/SBSTA/1996/7/Rev.1 and Add.1-3).[3] The conclusions of the third session of the SBSTA relating to its consideration of the IPCC Second Assessment Report may be found in document FCCC/SBSTA/1996/8, paragraphs 27-32.

III. STRUCTURE OF THE THIRD ASSESSMENT REPORT

9. The IPCC Third Assessment Report "Climate Change 2001" provides a comprehensive and up-to-date assessment of the policy-relevant scientific, technical and socio-economic dimensions of climate change. It concentrates on new findings since 1995, and pays greater attention to the regional (in addition to the global) scale, and to non-English literature.

10. The Third Assessment Report consists of reports of the three IPCC Working Groups (each with a brief Summary for Policymakers, a Technical Summary (TS), and a series of chapters) and the Synthesis Report. According to IPCC procedures, the Summaries for Policymakers were approved line by line by the respective working groups, and the underlying assessments were accepted. Working group I assessed the scientific aspects of the climate system and climate change. Working group II assessed the scientific, technical, environmental, economic and social aspects of the vulnerability (sensitivity and adaptability) to climate change of, and the negative and positive consequences (impacts) for, ecological systems, socio-economic sectors and human health, with an emphasis on regional, sectoral and cross-sectoral issues. Working Group III assessed the scientific, technical, environmental, economic and social aspects of the mitigation of climate change, and methodological aspects of cross-cutting issues (e.g. equity, discount rates and decision-making frameworks). All three reports contain a section in their SPM and TS focusing on the gaps in information and understanding that remain and how these might be addressed.

11. The contributions of the three working groups were published in July 2001 as:[4]

Volume 1: <u>Climate Change 2001: The Scientific Basis</u>

12. The volume was approved and accepted at the eighth session of Working Group I (WG I) in Shanghai, China on 20 January 2001. It contains fourteen chapters describing the current state of understanding of the physical climate system, the factors that drive climate change and the detection and the attribution of human influence on recent climate changes. The report also analyses past climate changes and presents projections of future climate changes, using a wide range of scenarios of future emissions of greenhouse gases and aerosols.

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[3] Also issued as FCCC/CP/1996/5 and Add.1-3.

[4] The term "volume" is used for convenience in this document. The IPCC reports are not identified as volumes.

Volume 2: Climate Change 2001: Impacts, Adaptation and Vulnerability

13. The volume was approved and accepted at the sixth session of Working Group II (WG II) in Geneva, Switzerland on 16 February 2001. It consists of nineteen chapters covering environmental, economic and social dimensions of climate change impacts, vulnerability and adaptation responses across a range of systems and sectors at regional and global scales. The scope of the current WG II report is broader than the scope of previous WG II assessments, which focused primarily on environmental and biophysical aspects of possible climate change impacts.

Volume 3: Climate Change 2001: Mitigation

14. The volume was approved and accepted at the sixth session of Working Group III (WG III) in Accra, Ghana on 3 March 2001. It contains ten chapters addressing potential technological and biological greenhouse gas emission reduction options to mitigate climate change, their costs and ancillary benefits, barriers to their implementation, and policies, measures and instruments to overcome such barriers. These issues are considered in the report in the broader context of development, equity and sustainability.

Volume 4: Climate Change 2001: Synthesis Report

15. This has been sent to governments for review and will be considered by the IPCC at its eighteenth session in Wembley, United Kingdom of Great Britain and Northern Ireland between 24-29 September 2001. The Synthesis Report is designed to address nine policy-oriented issues and should upon completion provide a convenient summary of information.

IV. GENERAL OBSERVATIONS

A. Introduction

16. The IPCC Third Assessment Report (TAR) is as an authoritative source of the best available information on the science, impacts, technological options and economics of climate change. Those interested in learning about - and acting upon - climate change have access to the best information that the scientific community can offer at this time.

17. In addition, the TAR is a useful input to the work of the Parties to the Convention and on the Kyoto Protocol, and particularly to any consideration of future response measures by Parties.

B. Availability of the report

18. A set of the TAR reports in English, and advance copies of the three SPMs and TSs in official languages of the United Nations, were made available to delegations at the resumed sixth session of the COP in Bonn in July 2001. The three SPMs and TSs will soon be available in all six languages of the United Nations on the IPCC web site. The three working group reports will be available in English on the IPCC web site as well as on CD-ROM.[5] The Synthesis Report will be available in English for delegates at the seventh session of the Conference of the Parties. It

[5] www.ipcc.ch

will also be translated into the other official languages of the United Nations and made available on the IPCC web site and on CD-ROM.

C. Representativeness of the report

19. The Third Assessment Report was prepared by authors from around the world. It was compiled by some 450 lead authors, scientists and technical experts from more than 100 countries between July 1998 and January-March 2001. In addition, some 800 contributing authors participated in developing the report. Teams of authors responsible for the preparation of each chapter included scientists and technical experts from developed and developing countries and countries in economic transition.

D. Review process

20. The report has been subject to IPCC peer review, involving governments, scientists and other specialists from governmental and non-governmental organizations. Drafts of the report were circulated twice for review: first to experts and then to both governments and experts. Comments from more than 1000 reviewers were considered and incorporated into the report under the guidance of about 80 review editors. Diverging scientific and technical views have been reflected. The revised reports of the three working groups along with SPMs and TSs were presented for consideration at sessions of the respective working group panels, in which more than 100 countries were represented. The panels approved the SPMs in detail and accepted the full reports, which remain the responsibility of the lead authors.

E. Use of the report

21. The IPCC reports have been used by scientists, climate change experts and policymakers. The Third Assessment Report is the most comprehensive evaluation of current scientific, technical, and socio-economic information on climate change since the Second Assessment Report in 1995. It is expected that the climate change community will make maximum use of the entire TAR including the TSs and the supporting chapters.

V. DISCUSSION

22. The TAR contains information with broad implications for the possible work of the SBSTA over the next few years. The subject matter is vast; hence any treatment in this document is of necessity limited to only a small portion of the IPCC material. The following subject matter is intended to stimulate the thinking of Parties in anticipation of a broad discussion by the SBSTA, particularly about aspects relevant to its future work. The following topics are examples, but they are not intended to be a comprehensive list of possible future activities.

Providing advice on scientific and technological matters relating to Article 2 of the Convention

23. The ultimate objective of the Convention, as expressed in Article 2, "is to achieve ... stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame to allow ecosystems to adapt naturally to climate change, to ensure that food

production is not threatened and to enable economic development to proceed in a sustainable manner."

24. The TAR provides new scientific information and evidence to contribute to the determination of what constitutes "dangerous anthropogenic interference with the climate system". It provides, first, new projections of future concentrations of greenhouse gases (GHGs) in the atmosphere, global and regional patterns of temperature and precipitation, and sea levels. It also explains that possibilities exist for abrupt and irreversible changes in ocean circulation and the major ice sheets. Second, it provides an assessment of the biophysical and socio-economic impacts of climate change, with regard to risks to unique and threatened systems, risks associated with extreme weather events, the distribution of impacts, aggregated impacts, and risks of large-scale, high impact events. Third, it provides an assessment of the technical and economic potential for achieving different levels of GHG concentrations in the atmosphere through mitigation, as well as information on how adaptation can reduce vulnerability, including the costs and benefits of various options. The TAR attempts to identify which findings are robust and what are the key uncertainties.

25. The basis for determining what constitutes "dangerous anthropogenic interference" will vary among regions and countries, depending on the local nature and consequences of climate change impacts, and also on the mitigative and adaptive capacity available to cope with climate change. The task of the IPCC is to provide policymakers with sound scientific information to make judgements as to what constitutes "dangerous anthropogenic interference" with the climate system. This value judgement rests collectively with the Parties to the UNFCCC, taking into account the scientific information provided and, among other factors, the principles contained in Article 3 of the Convention.

26. Since publication of the SAR, the Conference of the Parties has agreed to the Kyoto Protocol, although it is generally recognized that the Protocol will not prevent increases in global emissions, concentrations of GHGs or temperatures throughout this century. Volume 2 of the TAR synthesizes much information about the risks that are likely to evolve for different natural and man-made systems during the century as global mean annual temperature increases. With the information available in the TAR, Parties may wish to evaluate what constitutes "dangerous anthropogenic interference with the climate system" and how they wish to prevent it.

27. Questions: What advice might the SBSTA wish to provide to the COP concerning how to define "dangerous anthropogenic interference with the climate system"? What further steps should be undertaken to prevent "dangerous anthropogenic interference with the climate system"?

Supporting the efforts of Parties to undertake cooperative research under Articles 4.1 (g)(i) and Article 9.2 (a)(i) of the Convention

28. The TAR and its Synthesis Report contain descriptions of the current state of knowledge on the climate of the past and the present, together with an explanation of the current understanding of the forcing agents and processes in the climate system and how well they can be represented in climate models. Many factors continue to limit the ability to detect, attribute and understand current and future climate changes, as well as to assess climate change impacts, vulnerabilities and adaptation options. The SPM and the TS of the WG I report identify areas

where further work is needed. In a similar manner, WG II has identified areas where further research is needed with respect to assessing impacts, vulnerabilities and adaptation options. Collectively, the information prepared by these two working groups suggests that if better information is to be available for decision-making in the future, Parties will need to invest in research programmes, training of scientists and improving building scientific infrastructures in their countries. Information from the United States of America and the European Union suggests that support for global change research has remained nearly level or decreased slightly over the last five years.[6]

29. Questions: What role, if any, should the SBSTA play with regard to identifying assessing promoting research relating to climate change science and impacts, adaptation and vulnerability? What specific activities should be given priority, bearing in mind the roles of other international organizations and bodies and the capacities of the SBSTA?

Supporting the efforts of Parties to identify innovative, efficient and state-of-the-art technologies and know-how under Article 9.2 (d) of the Convention

30. Volume 3 of the TAR assesses a large body of information on technological options for reducing GHG emissions or enhancing sinks in various economic sectors and regions. It evaluates a range of barriers that impede the implementation of technologies, and describes what is known about the costs of various technical options at the global, national and sectoral levels. "Gaps in knowledge" are identified in the SPM and further elaborated in the TS of the report.

31. Volume 3 also provides substantial information on the emission scenarios of the IPCC Special Report on Emission Scenarios (SRES). The low emission scenarios, however, assume that significant technological advances are possible over the next several decades, particularly in the energy sector. These assumptions stand in marked contrast to actual expenditures by IEA member countries on energy research and developments which have decreased from approximately US$ 9 billion in 1990 and US$ 7.1 billion in 1998.[7]

32. Questions: What role, if any, should the SBSTA play with regard to addressing the "gaps in knowledge" identified in the WG III report, *inter alia*, with regard to furthering the exploration of regional, country and sectoral potentials for technological and social innovation options? Given the trends in government expenditures over the past decade, what should the SBSTA do to encourage investments in research and development on mitigation technologies, particularly for the energy sector?

Encouraging cooperation among Parties in preparing for adaptation to the impacts of climate change under Article 4.1(e)

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[6] The US Global Change Research Program had a research budget of US$ 1827.7 million in fiscal year 1995 and US$ 1695.0 million in fiscal year 2000. The budget for the Framework Programme on Climate research of the European Union was EUR 63 million in 1995 compared to EUR 70 million in 2001.

[7] Between 1990 and 1998, for example, expenditures for energy conservation research and development have increased from US$ 517 million to US$ 971 million, expenditures for fossil fuel research and development have decreased from US$ 1725 million to US$ 593 million, expenditures for nuclear research and development have decreased from US$ 4993 million to US$ 3627 million, and expenditures on renewable energy research and development have increased from US$ 549 million to US$ 586 million. See report by the International Energy Agency (IEA) entitled "Energy policies of IEA countries - 2000 review" for additional information.

33. Working Group II has identified and assessed the sensitivity, adaptive capacity and vulnerability of natural and human systems to climate change. It notes that the ability to adapt to climate change depends on factors such as wealth, technology, education, information, skill, infrastructure, access to resources and management capabilities. It briefly identifies possible adaptation options for sectors such as water resources, the coastal zone, ecosystems, human settlements, energy and industry, insurance and financial services and human health.

34. Question: What role, if any, should the SBSTA play regarding cooperation among Parties in developing methodologies to assess impacts and adaptation options, to exchange information on their experience with adaptation measures and to develop new management strategies and technologies?[8]

Providing advice on scientific and technological matters to the SBI and the COP relating to the implementation of the Convention under Article 9.1

35. Volume I of the TAR provides new information relating to tropospheric ozone, its precursors, and aerosols. These pollutants affect the radiative balance of the earth's atmosphere. It notes, for example, that tropospheric ozone is the third most important greenhouse gas after carbon dioxide (CO_2) and methane (CH_4), and that carbon monoxide (CO) is an important indirect GHG (100 Mt of CO is equivalent to about 5 Mt of CH_4). With regard to aerosols, it notes that significant progress has been achieved in characterizing the direct forcings of the major aerosols, particularly sulphates, biomass burning aerosols, and fossil fuel organic carbon and black carbon aerosols. The information may have implications for future mitigation strategies, but at a minimum for the collection and reporting, and subsequent review, of GHG data. It specifically relates to the ongoing work of the subsidiary bodies on the UNFCCC reporting guidelines for annual GHG inventories from Parties included in Annex I to the Convention, and possibly for other Parties as well.

36. The TAR also updates the Global Warming Potentials (GWPs) for many GHGs and provides GWPs for an expanded set new category of GHGs. The information may also have implications for future mitigation strategies as well as for the UNFCCC reporting guidelines for GHG inventories.

37. Question: Does the SBSTA wish to initiate a process for considering scientific information in the TAR, e.g. on tropospheric ozone, including its precursors, aerosols and the updated information on GWPs, with the aim of informing the SBI about aspects relevant to the implementation of the Convention, and if so, how?

38. Volume 3 of the TAR provides a large collection of new information on options to reduce GHG emissions and enhance sinks. Much of the information may be relevant to the development of national strategies and in the preparation of national communications by Parties to the Convention. For example, Annex I Parties may find the information helpful in the development of national policies and measures and in the preparation of projections of GHG emissions. In addition, the information in Volume 3 of the TAR may be useful to Parties not included in Annex I to the Convention (non-Annex I Parties) in the preparation of project proposals for submission to the Global Environment Facility.

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[8] Also see document FCCC/SBSTA/2001/INF.4

39. Questions: Should the SBSTA encourage or request Parties to consider the information on technologies in Volume 3 of the TAR in the preparation of national communications under the Convention, and if so, how? Should the SBSTA encourage non-Annex I Parties to consider the IPCC information on technologies in the preparation of projects as noted above. Should the SBSTA take steps to expand the information on the new technologies in Volume 3 of the TAR, and if so, for what purpose?

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